



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/770,250	02/02/2004	Brian W. Moroney	BLD920030008US1	9447
50441 7590 11/23/2010 DUFT BORNSSEN & FISHMAN, LLP 1526 SPRUCE STREET SUITE 302 BOULDER, CO 80302				
EXAMINER				
MILLA, MARK R				
ART UNIT		PAPER NUMBER		
2625				
MAIL DATE		DELIVERY MODE		
11/23/2010		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.



UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents
United States Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450
www.uspto.gov

**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/770,250
Filing Date: February 02, 2004
Appellant(s): MORONEY ET AL.

Sean J. Varley
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 8/23/10 and supplemental appeal brief filed 9/13/10 appealing from the Office action mailed 4/22/10.

(1) Real Party in Interest

The examiner has no comment on the statement, or lack of statement, identifying by name the real party in interest in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The following is a list of claims that are rejected and pending in the application:
Claims 1-5, 8-11, 13, and 15-19 stand rejected and pending in the application.

(4) Status of Amendments After Final

The examiner has no comment on the appellant's statement of the status of amendments after final rejection contained in the brief.

(5) Summary of Claimed Subject Matter

The examiner has no comment on the summary of claimed subject matter contained in the brief.

(6) Grounds of Rejection to be Reviewed on Appeal

The examiner has no comment on the appellant's statement of the grounds of rejection to be reviewed on appeal. Every ground of rejection set forth in the Office action from which the appeal is taken (as modified by any advisory actions) is being maintained by the examiner except for the grounds of rejection (if any) listed under the subheading "WITHDRAWN REJECTIONS." New grounds of rejection (if any) are provided under the subheading "NEW GROUNDS OF REJECTION."

(7) Claims Appendix

The examiner has no comment on the copy of the appealed claims contained in the Appendix to the appellant's brief.

(8) Evidence Relied Upon

5,684,934	Chen et al.	11-1997
6,236,450	Ogura	5-2001

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-5, 8-13, and 15-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,684,934 to Chen et al., as cited in the IDS dated 2/2/04 in view of U.S. Patent No. 6,236,450 to Ogura.

Regarding claims 1 and 15, Chen discloses a method of reprinting at least one page of a printed document, the method comprising: receiving a print job at a printer to generate the printed document, wherein each page of the printed document corresponding with a logical page in the print job (see Figs. 1 and 3 and column 2 line 58-column 3 line 14), determining that a page of the printed document includes an error (see column 3 lines 15-32 and 62-66, column 4 lines 5-32 and column 5 lines 23-39, error detection units **6A**, **6B**, **6C**, and **6D** detect page errors), modifying the print job to include a new logical page (see column 5 lines 30-55, when an error is detected with a particular page, printing is momentarily halted and new page data is reinitialized and set to the print engine for printing).

Chen does not disclose expressly instructing a user to load the printed document into an inserter tray on the printer, processing each page of the printed document from the inserter tray on the printer to an output tray on the printer by: determining if a current page being processed includes the error, and if the current page includes the error, then discarding the current page, printing the new logical page from the modified print job to generate a new page, and sending the new page to the output tray in place of the current page including the error.

Ogura discloses determining that at least one page of a document includes an error (see column 8 line 55-column 9 line 3, system detects when the document gets jammed), instructing a user to load the document into an inserter tray on the printer (see column 8 line 61-column 9 line 10 and column 13 lines 9-15, an error message is displayed to the user instructing the user to remove all document and set them again in the input tray), processing each page of the document from the inserter tray on the printer to an output tray on the printer by: determining if a current page being processed includes the error (see column 9 line 23-column 10 line 28), and if the current page includes the error, then discarding the current page, printing the new logical page from the modified print job to generate a new page, and sending the new page to the output tray in place of the current page including the error (see column 9 line 23-column 10 line 28 and column 12 lines 49-60, references shows that during a copy procedure if the document being copied jams then all the pages of the document, those that were already copied and those that have not yet been copied, are placed back into the input tray/ADF and processing starts again with those pages that had already been copied

going straight to the output bin and when the page or pages that jammed are determined then copying proceeds to ensure that the entire document has been copied properly without redundancies and without missing any pages).

Regarding claim 8, Chen discloses a system operable to reprint a page of a printed document, the system comprising: a printer operable to receive a print job, and to generate the printed document based on the print job, wherein each page of the printed document correspond with a logical page in the print job (see Figs. 1 and 3 and column 2 line 58-column 3 line 14), wherein the printer is further operable to determine that a page of the printed document includes an error and to modify the print job to include a new logical page (see column 3 lines 15-32 and 62-66, column 4 lines 5-32 and column 5 lines 23-55, error detection units **6A**, **6B**, **6C**, and **6D** detect page errors and when an error is detected with a particular page, printing is momentarily halted and new page data is reinitialized and set to the print engine for printing).

Chen does not disclose expressly a user interface operable to instruct a user to load the printed document into an inserter tray on the printer, the printer further operable to process each page of the printed document from the inserter tray on the printer to an output tray on the printer, and to determine if a current page being processed includes the error, wherein the printer, responsive to determining that the current page includes the error, is further operable to discard the current page, print the new logical page from the modified print job to generate a new page, and to send the new page to the output tray in place of the current page including the error.

Ogura discloses software configured to determine that at least one page of a document includes an error (see column 8 line 55-column 9 line 3, system detects when the document gets jammed), a user interface operable to instruct a user to load the printed document into an inserter tray on the printer (see column 8 line 61-column 9 line 10 and column 13 lines 9-15, an error message is displayed to the user instructing the user to remove all document and set them again in the input tray), the printer further operable to process each page of the printed document from the inserter tray on the printer to an output tray on the printer, and to determine if a current page being processed includes the error, wherein the printer (see column 9 line 23-column 10 line 28), responsive to determining that the current page includes the error, is further operable to discard the current page, print the new logical page from the modified print job to generate a new page, and to send the new page to the output tray in place of the current page including the error (see column 9 line 23-column 10 line 28 and column 12 lines 49-60, references shows that during a copy procedure if the document being copied jams then all the pages of the document, those that were already copied and those that have not yet been copied, are placed back into the input tray/ADF and processing starts again with those pages that had already been copied going straight to the output bin and when the page or pages that jammed are determined then copying proceeds to ensure that the entire document has been copied properly without redundancies and without missing any pages).

**KSR analysis – Combining Prior Art Elements According to Known
Methods to Yield Predictable Results**

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to utilize the method of gathering the entire document and reloading the document into an input tray, after an error is detected, and processing the document to send pages that were correctly processed prior to the error to an output bin and to process pages that were not yet printed and send the pages to the output bin to properly print or copy a document, as described by Ogura, to replace just printing the pages that are determined not to be printed after an error is detected, as described by Chen. Replacing the entire document ensures that the document will not contain the page in which the error was detected and thereby eliminate the wasting of time and resources. It is well known in the art to reprint pages that contain errors and replace the newly printed pages with those that contained errors without the need to reprint the entire document, as is shown in the references cited by the examiner. Therefore, it would have been obvious to one of ordinary skill in the art to adapt the teachings of Ogura into a printing system as set forth by Chen to arrive at a system that prints a print job, determines if an error exists on a printed page and then puts the entire job back into an input tray and reprints the pages that contain errors and replaces those sheets in the document, thereby arriving at the invention set forth in claims 1, 8, and 15.

Therefore, it would have been obvious to combine Ogura with Chen to obtain the invention as specified in claims 1, 8, and 15.

Regarding claims 2, 9, and 16, Chen further discloses identifying a logical page in the received print job corresponding with the current page being processed,

identifying a logical page in the modified print job corresponding with the identified logical page in the received print job, determining if there is a difference between the identified logical pages; and indicating that the current page includes the error in response to determining that there is a difference (see column 3 line 42-column 4 line 32, column 5 lines 23-55, column 9 lines 3-63, column 10 lines 5-11, and column 11 lines 13-18, Chen discloses detecting an error with logical pages of a print job or with the physical print job, such as a paper jam, after the error is detected, logical pages being affected by the error will be cleared and an error recovery process will be performed. During the error recovery process pointers are utilized to determine where the error occurred and where to start generating the new logical pages to be printed. Chen further discusses the error recovery process, specifically the reposition process, the repositioning process ensures upon completion printing will resume with the correct page to sheet positioning). Ogura further discloses wherein determining if the current page being processed includes the error further comprises: identifying a page in the received print job corresponding with the current page being processed, identifying a page in the modified print job corresponding with the identified page in the received print job, determining if there is a difference between the identified pages, and indicating that the current page includes the error in response to determining that there is a difference (see column 9 line 23-column 10 line 28 and column 12 lines 49-60, references shows that during a copy procedure if the document being copied jams then all the pages of the document, those that were already copied and those that have not yet been copied, are placed back into the input tray/ADF and processing starts again with those pages

that had already been copied going straight to the output bin and a comparison being made to determine page that jammed and needs to be reprinted to ensure that the entire document has been copied properly without redundancies and without missing any pages).

Regarding claims 3, 10, and 17, Chen further discloses querying the user for the modified print job in response to determining that a page of the printed document includes an error (see column 4 lines 33-52, when an error is detected the user can request a backspace request to reprint a page from a desired point).

Regarding claims 4, 11, and 18, Ogura further discloses determining that the error is a paper jam and notifying the user of the paper jam (see column 8 line 55-column 9 line 3).

Regarding claims 5, 13, and 19, Ogura further discloses wherein the error includes an update to the print job after printing the print job (see column 9 lines 4-33, a message is displayed instructing the user to remove all documents and place them back into the input tray and then this is detected by the printer and processing starts again with those pages that had already been copied going straight to the output bin and when the page or pages that jammed are determined then copying proceeds to ensure that the entire document has been copied properly without redundancies and without missing any pages).

(10) Response to Argument

Applicant's arguments filed 8/23/10 have been fully considered but they are not persuasive.

The applicant asserts that neither Chen (US 5,684,934) nor Ogura (US 6,236,450) teach or suggest if the current page includes the error, then discarding the current page, printing the new logical page from the modified print job to generate a new page, and sending the new page to the output tray in place of the current page including the error, as recited in claim 1 and identifying a logical page in the received print job corresponding with the current page being processed, identifying a logical page in the modified print job corresponding with the identified logical page in the received print job, determining if there is a difference between the identified logical pages, and indicating that the current page includes the error in response to determining that there is a difference, as recited in claim 2. The Examiner respectfully disagrees as the combination of Chen and Ogura does disclose such features. Particularly, Chen discloses detecting an error with logical pages of a print job or with the physical print job, such as a paper jam. After the error is detected, logical pages being affected by the error will be cleared (column 4 lines 5-32) and an error recovery process will be performed. During the error recovery process pointers are utilized to determine where the error occurred and where to start generating the new logical pages to be printed (column 5 lines 23-55). Chen further discusses the error recovery process, specifically the reposition process, the repositioning process ensures upon completion, that printing will resume with the correct page to sheet positioning (column 9 lines 60-63). For

example, as illustrated in figure 4, if an error occurs while printing page "H", the print process is halted temporarily and then page "H" will be reprinted followed by the rest of the document pages that have been stored in the buffer. Ogura discloses that during a copy procedure if the document being copied jams then a message is displayed to a user to **reload all the pages of the document, those that were already copied and those that have not yet been copied, and placed the pages back into the input tray/ADF** and processing starts again with those pages that had already been copied going straight to the output bin and **when the page or pages that jammed are determined then copying proceeds by reprinting the error page** to ensure that the entire document has been copied properly without redundancies and without missing any pages. During a paper jam it is obvious that the page that was printing during the jam will need to be discarded and reprinted due to the destruction of the paper that occurs during a paper jam. The Examiner would like to point out that the method claim language set forth in independent claims 1 and 15 do not limit the discarding of the current page being executed by the printing device and therefore may be done by a user. Ogura further states that special copy modes, such as "page replacing", can store image information on all documents D in a memory, which would be analogous to logical pages of a document, and that executing of the document can be based on the image data stored in memory (column 12 lines 49-60). Although Ogura does not specifically state the use of logical pages of a print job, Ogura does imply such and Chen discloses use of logical pages of a document for printing an error recovery. At the time of the invention, it would have been obvious to a person of ordinary skill in the art

to utilize the method of **gathering the entire document and reloading the document into an input tray, after an error is detected, and processing the document to send pages that were correctly processed prior to the error to an output bin and to process pages that were not yet printed and send the pages to the output bin to properly print or copy a document**, as described by Ogura, to replace just printing the pages that are determined not to be printed after an error is detected, as described by Chen. Replacing the entire document ensures that the document will not contain the page in which the error was detected and thereby eliminate the wasting of time and resources. It is well known in the art to reprint pages that contain errors and replace the newly printed pages with those that contained errors without the need to reprint the entire document, as is shown in the references cited by the examiner. Therefore, it would have been obvious to one of ordinary skill in the art to adapt the teachings of Ogura into a printing system as set forth by Chen to arrive at a system that prints a print job, determines if an error exists on a printed page and then puts the entire job back into an input tray and reprints the pages that contain errors and replaces those sheets in the document.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Mark R. Milia/

Examiner, Art Unit 2625

Conferees:

David Moore

/David K Moore/

Supervisory Patent Examiner, Art Unit 2625

/King Y. Poon/

Supervisory Patent Examiner, Art Unit 2625

King Poon